

REMARKS

The above-identified patent application has been further reviewed in light of the Examiner's Action dated December 17, 2009. Claims 36-38 have been amended, and Claim 35 has been canceled, without intending to abandon or to dedicate to the public any patentable subject matter. Accordingly, Claims 1-3, 6-14, 16-34 and 36-38 are now pending. As set forth herein, reconsideration and withdrawal of the rejections of the claims as set forth in the final Office Action are respectfully requested.

Claims 16-19, 20-25, and 36-37 are rejected under 35 U.S.C. 101 due to the claimed invention being directed to non-statutory subject matter. In particular, Claims 16 and 17 are interpreted as software *per se*, even though they explicitly recite an apparatus. Initially, Applicants note that there is no prohibition against patenting software *per se*. Moreover, the claims subject to this rejection recite hardware. For example, Claim 16 recites a load balancing apparatus. An apparatus is reasonably interpreted as comprising hardware. Moreover, Claim 16 recites specific elements related to hardware, including a service location. Claim 20 recites a work allocation apparatus. The apparatus of Claim 20 explicitly includes a plurality of service locations, a plurality of service resources, a communication network interface, and a controller. Such components are clearly hardware. Accordingly, Claims 16-19, 20-25 and 36-37 recite patentable subject matter.

Claims 35-38 are rejected under 35 U.S.C. 112, second paragraph, due to indefiniteness for failing to particularly point out and distinctly claim the subject matter that Applicants regard as the invention. In particular, the Office Action finds that the recited "EWT" and "WAT" are unclear. Moreover, the Office Action suggests that amendments be entered to these claims, to explicitly define these terms, as set forth in pending and allowable Claim 8. In the amendments set forth above, Claim 35 has been canceled, and Claims 36-38 have been amended, as suggested by the Office Action. Applicants note that these amendments do not add any new matter to the application. In addition, these amendments do not require further consideration and/or search, as they address a formality. Moreover, as Claims 35-38 have been found allowable if the indefiniteness rejections were remedied, entry of these amendments is respectfully requested.

Claims 1-3, 6-7, 9-11, 13-14, 16-26, 30-31 and 33-34 stand rejected as obvious under 35 U.S.C. §103 in view of U.S. Patent No. 6,748,414 to Bournas ("Bournas"), Applicant's admitted prior art ("AAPA"), and/or U.S. Patent No. 5,506,898 to Constantini et al. ("Constantini"). To

establish a *prima facie* case of obviousness, all claim limitations must first be taught or suggested by the prior art. *See, e.g., DyStar Textilfarben GmbH & Co. Deutschland KG v. C.H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006); 80 U.S.P.Q.2d 1641, 1645 (2006). "All words in a claim must be considered in judging the patentability of that claim against the prior art." MPEP § 2143.03 (citing *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970)). The Examiner must then provide an explicit analysis of the motivation for combining the references. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007); 82 U.S.P.Q.2d 1385, 1396 (2007) ("a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art . . ."). While the Examiner can choose one of several exemplary rationales from the MPEP to support an obviousness rejection, all the rationales in the MPEP still require the Examiner to demonstrate that all the claim elements are shown in the prior art. *See* MPEP § 2143, Original Eighth Edition, August 2001, Latest Revision July 2008.

The claimed invention is generally directed to a method and system that balances resource loads for a plurality of service locations. More particularly, the claims recite the computation of a relative probability of servicing work requests for each service location included in a plurality of service locations. Work requests are then assigned to a service location based on the determined relative probabilities, allowing work to be efficiently routed. Moreover, the pending claims generally require determining a relative probability by calculating a number of opportunities to service the work request within a target time by each service location included in the plurality of service locations. There is no disclosure in any of the cited references of determining a number of opportunities to service a work request within a target time as claimed. Therefore, all of the claim elements are not disclosed by the cited references, and the claims should be allowed.

The Bournas reference is generally directed to a method and apparatus for the load balancing of non-identical servers in a network environment. More particularly, Bournas discusses determining a load estimate for different servers. The load estimate is calculated by dividing the total of observed service times at a server by the total of observed inter-arrival times at that server. (Bournas, col. 6, ll. 21-27.) For servers with variable service rates, an estimate of the load on a server is calculated using the number of completed service requests (N_k) divided by the total of observed inter-arrival times (I_k), times the actual amount of work completed by the

server (A_k), divided by the observed service rates at the server (S_k). (Bournas, col. 7, ll. 10-25.) This estimate can then be used to compare the loads on different servers, to identify the server with the smallest work load. (Bournas, col. 7, ll. 25-29.) The estimate of a load calculated by Bournas is not a disclosure of determining a probability of servicing a work request within a target time for a plurality of service locations as recited by the claims. As an initial matter, there is absolutely no disclosure in Bournas of a target time. Moreover, the pending claims recite determining a probability by calculating a number of opportunities to service the work request within the target time. There is absolutely no disclosure in Bournas of calculating a number of opportunities to service a work request within a target time. Therefore, the rejections of Claims 1-3, 6-7, 13, 16-17, 20, 25-26 and 28 as being obvious in view of Bournas should be reconsidered and withdrawn.

The final Office Action acknowledges that Bournas does not teach that a service location comprises at least one split. Moreover, the final Office Action asserts that it would have been obvious to one of ordinary skill in the art to modify Bournas to include the use of a split. However, even if the division of agents into splits were combined with the disclosure of Bournas, each and every element of the pending claims would not be taught, suggested, or described. For example, the failure of Bournas to teach the calculation of a probability of servicing a work request within a target time is not remedied by the AAPA. Therefore, for at least these reasons, the rejections of Claims 14, 18 and 21-24 as being unpatentable over Bournas in view of the AAPA should be reconsidered and withdrawn.

The final Office Action acknowledges that Bournas does not teach calculating an advanced time metric. For such disclosure, the final Office Action relies on the Constantini reference. The Constantini reference is generally directed to an expected wait time indication arrangement. However, Constantini does not provide a disclosure of calculating a number of opportunities to service work within a target time. Accordingly, combining the Bournas and Constantini references would not provide a teaching of the claimed calculation of a number of opportunities to service a work request within a target time as recited by the claims. Therefore, the rejections of Claims 9-11, 19, 30-31 and 33-34 should be reconsidered and withdrawn.

The Applicants note with appreciation the Examiner's indication that Claims 8, 12, 29 and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form, and that Claims 35-38 would be allowable if rewritten in

independent form and if rejections in view of 35 U.S.C. §112 were remedied. As set forth above, it is submitted that the rejections in view of 35 U.S.C. §112 have been remedied, because the suggestions provided by the Examiner have been followed with respect to those claims.


Moreover, for the reasons set forth above, it is submitted that the independent claims from which Claims 8, 12, 29, 32 and 35-38 depend are allowable. Therefore, allowance of all of the pending claims is respectfully requested.

Based on the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

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By: 
Bradley M Knepper
Reg. No. 44,189
1560 Broadway, Suite 1200
Denver, Colorado 80202
Telephone: 303-863-9700